

WHAT IS CLAIMED IS:

1. An Internet refrigerator comprising:  
a main board on which a chip set is mounted;  
a heat sink plate facing a surface of the main board and absorbing heat generated by the chip set; and  
a pipeline having both ends connected to an interior of a freezer compartment of the refrigerator and arranged to contact a lower surface of the heat sink plate at a portion thereof, so as to provide heat exchange between the freezer compartment of the refrigerator to the heat sink plate.

2. The Internet refrigerator as set forth in claim 1, wherein a chip set generating a relatively small amount of heat is arranged on an upper surface of the main board and a chip set generating a relatively large amount of heat is arranged on the lower surface of the main board.

3. The Internet refrigerator as set forth in claim 1, wherein the heat sink plate is arranged to be facing the lower surface of the main board.

4. The Internet refrigerator as set forth in claim 1, wherein the heat sink plate is formed of one of copper and aluminum.

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5. The Internet refrigerator as set forth in claim 1, wherein the heat sink plate is coated with a

dehumidifying material, thereby preventing condensate water from being produced on surfaces of the heat sink plate.

6. The Internet refrigerator as set forth in claim 1, wherein the pipeline comprises a cold air input tube into which cold air from the freezer compartment of the refrigerator is introduced, a main tube which is a passage for the cold air introduced into the cold air input tube, and a cold air output tube that exhausts the cold air passed through the main tube to the freezer compartment of the refrigerator.

7. The Internet refrigerator as set forth in claim 6, wherein the main tube of the pipeline contacts the lower surface of the heat sink plate.

8. The Internet refrigerator as set forth in claim 7, wherein the main tube of the pipeline has a zigzag shape.

9. The Internet refrigerator as set forth in claim 1, further comprising a temperature sensor arranged on a surface of the main board, that detects a temperature of the main board, the temperature increasing due to heat generated by the chip set.

10. The Internet refrigerator as set forth in claim 9, further comprising a plurality of valves which open the pipeline to allow the cold air in the freezer

compartment of the refrigerator to flow into the pipeline when the temperature detected by the temperature sensor is higher than a predetermined temperature, and close the pipeline when the temperature detected by the temperature sensor is lower than the predetermined temperature.

11. An Internet refrigerator comprising:

a main board with a chip set mounted thereon;

a temperature sensor that detects a temperature of the main board;

a heat sink plate facing a surface of the main board and absorbing heat generated by the chip set;

a pipeline having both ends connected to an interior of a cooled compartment of the refrigerator and arranged to contact a lower surface of the main board at a portion thereof so as to transfer cold air in the cooled compartment of the refrigerator to the heat sink plate; and

a cooling fan arranged in the cooled compartment of the refrigerator, that introduces cold air from the cooled compartment of the refrigerator into the pipeline.

12. The Internet refrigerator as set forth in claim 11, further comprising a plurality of valves which open the pipeline to allow cold air from the cooled compartment of the refrigerator to flow into the pipeline when the temperature detected by the temperature sensor is higher than a predetermined

temperature, and close of the pipeline when the temperature detected by the temperature sensor is lower than the predetermined temperature.

13. The Internet refrigerator as set forth in claim 12, wherein rotation of the cooling fan starts when the valves are opened and stops when the valves are closed.

14. The Internet refrigerator as set forth in claim 12, wherein the temperature sensor is a bi-metal sensor comprising two metals having different thermal expansion coefficients, respectively and the valves are opened and closed in response to deflection of a metal having a greater thermal expansion coefficient.

15. The Internet refrigerator as set forth in claim 11, wherein the temperature sensor is a bi-metal sensor comprising two metals having different thermal expansion coefficients, respectively.